REMARKS

In the Office Action[1], the Examiner rejected claim 15 under 35 U.S.C. § 101 as directed to non-statutory subject matter; rejected claims 1-6, 10-12, 14-15 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,254,747 to Osborn et al. ("Osborn"); rejected claims 7-9 under 35 U.S.C. § 103(a) as being unpatentable over Osborn in view of U.S. Patent Application Publication No. 2004/0076936 to Horvitz et al. ("Horvitz"); and rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Osborn in view of U.S. Patent Application Publication No. 2003/0018600 to Jammu ("Jammu").

By this Reply, Applicants amend claims 1, 6-10, and 13, and cancel claims 2-5, 11, 12, 14, and 15 without prejudice or disclaimer. Claims 1, 6-10, and 13 are pending in the application. Support for the claim amendments can be found in the original claims and specification. See, for example, paragraphs 64, 77, 87, 94, 97, 100-116 and Figs. 5, 8, and 10-12.

Interview Summary

As an initial matter, Applicants would like to thank Examiner Chang and Primary Examiner Sparks for the courtesies extended to Applicants' representative during the telephonic interview of February 26, 2010. During the interview, the Examiners and Applicants' representative discussed proposed claim amendments in view of the outstanding prior art rejections. The Examiners and Applicants' representative agreed that the proposed claim amendments, consistent with the amendments submitted

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[1] The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

herewith, were allowable over the prior art of record and would overcome the

outstanding rejections.

The claim amendments and remarks submitted herewith are consistent with the

discussion and agreements of the interview.

Rejection Under 35 U.S.C. § 101

Applicants have canceled claim 15, rendering the rejection under 35 U.S.C.

§ 101 moot. Accordingly, Applicants respectfully request withdrawal of this rejection.

Rejections Under 35 U.S.C. §§ 102 and 103

Applicants respectfully traverse the rejections under 35 U.S.C. §§ 102 and 103.

As agreed during the interview, the cited references, taken alone or in combination, fail

to disclose, suggest, or render obvious the subject matter of amended claims 1, 6-10,

and 13.

For example, amended independent claim 1 recites a vehicle information

processing system comprising, among other elements,

> a model storage unit storing a plurality of different Bayesian
> network models **corresponding to a plurality of
> recipients**, the Bayesian network models providing
> probabilistically appropriate **recommendations of media
> content to the recipients** depending on recommendation
> conditions;
>
> a select-model storage unit containing **a select-model** using
> probabilistic reasoning to **identify a Bayesian network
> model of the plurality of Bayesian network models** based
> on the recommendation conditions; [and]
>
> a model selecting unit for **selecting a Bayesian network
> model from the stored plurality of Bayesian network
> models using the stored select-model** by applying the
> probabilistic reasoning of the select-model to a
> recommendation condition . . .

(emphasis added). As agreed during the interview, the cited references, taken alone or in combination, fail to disclose or suggest a combination comprising at least the above-referenced elements of amended claim 1.

As discussed in the interview, Osborne relates to "[a] technique . . . for selecting among a plurality of service models for addressing serviceable events and faults in a complex machine system." Abstract. As noted in the Office Action at page 4, Osborne discloses, "[b]ased upon the operation of module 62 . . . one or more models 64 are selected for analysis and for determining recommendations of the system." Col. 7, ll. 38-40.

In Osborne, however, the models 64 "correspond . . . to one or more **components, functions, subsystems or field replaceable units** which could be the root cause of a **serviceable event** [of the complex machine]." Col. 10, ll. 26-28. In contrast, amended independent claim 1 recites "a plurality of different Bayesian network models **corresponding to a plurality of recipients**" (emphasis added). Moreover, in claim 1, "the Bayesian network models provid[e] probabilistically appropriate **recommendations of media content . . .**" (emphasis added). In contrast, Osborne's service modes provide "**service recommendations**" to a technician. See col. 10, ll. 28-30. Accordingly, as agreed during the interview, Osborne is irrelevant, non-analogous art with respect to amended claim 1. See MPEP § 2141.01(a).

Moreover, while Osborne may disclose selecting a service model and providing a service recommendation based on the selected service model, Osborne fails to disclose or suggest "a select-model storage unit containing **a select-model** using probabilistic

reasoning to **identify a Bayesian network model** of the plurality of Bayesian network models based on the recommendation conditions . . ." (emphasis added), as recited by amended independent claim 1. That is, <u>Osborne</u> only discloses service models, not **both** "a plurality of different **Bayesian network models** . . ." **and "a select-model** . . . **[for] identify[ing] a Bayesian network model** of the plurality of Bayesian network models . . ." (emphasis added), as recited by amended claim 1.

In view of the above, as agreed in the interview, <u>Osboune</u> fails to disclose or suggest the claimed "model storage unit," "select-model storage unit" and "a model selecting unit" of amended independent claim 1.

<u>Horvitz</u> fails to remedy the deficiencies of <u>Osborne</u>. <u>Horovitz</u> relates to "[a] new recommendation technique . . . that can be seen as a hybrid between memory-based and model-based collaborative filtering techniques . . . ." Abstract. Specifically, "[u]sing personality diagnosis, all data may be maintained throughout the processes, new data can be added incrementally, and predictions have meaningful probabilistic semantics." <u>Horovitz</u>, Abstract. <u>Horovitz</u>, however, fails to remedy the deficiencies of <u>Osborne</u> inasmuch as <u>Horovitz</u> also fails to disclose or suggest a combination comprising at least the claimed "model storage unit," "select-model storage unit" and "a model selecting unit" of amended claim 1.

<u>Jammu</u> fails to remedy the deficiencies of <u>Osborne</u> and <u>Horovitz</u>. <u>Jammu</u> relates to "[a] system and method for improving a causal network is provided. A new *apriori* probability is determined for a repair or a configuration factor within the causal network and compared to an old *apriori* probability." Abstract. <u>Jammu</u>, however, also fails to disclose or suggest a combination comprising at least the claimed "model storage unit,"

"select-model storage unit" and "a model selecting unit" of amended independent

claim 1.

Amended independent claim 6, though of different scope from claim 1, is

allowable over the cited references for similar reasons as discussed above in

connection with claim 1. In addition, claim 6 recites a vehicle information processing

system comprising, among other elements,

> a learning model information storage unit storing information **associating learning models with corresponding Bayesian network models of the stored Bayesian network models**; and
>
> a model learning unit for:
>
> > **identifying a learning model associated with the selected Bayesian network model based on the stored learning model information**;
> >
> > **learning the identified learning model** using the received response; and
> >
> > **updating the identified learning model** by specializing the identified learning model for the recommendation condition associated with the recipient . . .

(emphasis added). The cited references, taken alone or in combination, fail to disclose

or suggest a combination further comprising at least the claimed "learning model

information storage unit" and "model learning unit" of amended claim 6.

For example, as discussed above, Osborne only discloses a plurality of stored

service models. Osborne, however, fails to disclose or suggest "a learning model

information storage unit storing information **associating learning models with**

corresponding Bayesian network models of the stored Bayesian network models"

and "a model learning unit for . . . **identifying a learning model associated with the**

selected Bayesian network model based on the stored learning model

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information," "**learning the identified learning model . . . ,**" and "**updating the identified learning model . . .**" (emphasis added), as recited by amended independent claim 6.

Moreover, <u>Horovitz</u> and <u>Jammu</u> fail to remedy the deficiencies of <u>Horovitz</u> inasmuch as <u>Horovitz</u> and <u>Jammu</u> also fail to disclose or suggest the claimed "learning model information storage unit" and "model learning unit" of amended claim 6.

Amended independent claim 8, though of different scope from claims 1 and 6, distinguishes over the cited references for similar reasons as discussed above in connection with claim 1. In addition, claim 8 recites a vehicle information processing system comprising, among other elements,

> a learning data obtaining unit for obtaining learning data used **to bring the specialized models [specialized for the recommendation condition associated with the recipient] closer to a general model . . .**

(emphasis added). The cited references, taken alone or in combination, fail to disclose or suggest a combination further comprising at least the claimed "learning data obtaining unit" of amended claim 8.

At page 9, the Office Action concedes that <u>Osborne</u> fails to disclose or suggest the claimed "learning data obtaining unit," and relies on <u>Horovitz</u> to remedy the deficiencies of <u>Osborne</u>. Specifically, the Office Action asserts:

> Horvitz discloses a learning data obtaining unit for obtaining learning data used in learning by which the models specialized for each recommendation-condition . . . is brought closer to a general model (Horvitz: a general model, e.g., a posterior probabilistic model or true value, as in Abstract, line 11, and recommendation-condition, e.g., item rating or preferences as in Abstract, lines 7-8, a learning data obtaining unit, e.g., components 134 and/or 137 in Figure 1)." Pages 9-10.

In the cited portions, however, <u>Horovitz</u> only discusses how to determine the expected value of information to a particular user based on the probability that the user has the same "personality type" as every other user. There is no teaching or suggestion, however, of "obtaining learning data used **to bring the specialized models [specialized for the recommendation condition associated with the recipient] closer to a general model . . .**" (emphasis added), as recited by amended claim 8. Indeed, <u>Horovitz</u> is completely silent with respect to "a learning data obtaining unit for obtaining learning data used to bring the specialized models [specialized for the recommendation condition associated with the recipient] closer to a general model . . . ," as recited by claim 8.

Moreover, <u>Jammu</u> fail to remedy the deficiencies of <u>Osborne</u> and <u>Horovitz</u> inasmuch as <u>Jammu</u> also fails to disclose or suggest the claimed "learning data obtaining unit" of claim 8.

For at least the above reasons, as agreed during the interview, independent claims 1, 6, and 8 are allowable over the cited references. Moreover, the remaining claims are allowable at least due to their dependence from one of the independent claims. Accordingly, Applicants respectfully request the withdrawal of the rejections under §§ 102 and 103.
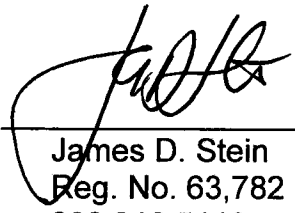
Conclusion

In view of the foregoing, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims. The Examiner is kindly invited to content the undersigned to resolve any remaining issues in the application.

Please grant any extensions of time required to enter this response and charge

any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

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Dated: March 2, 2010   By:_____

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